



UNITED STATES PATENT AND TRADEMARK OFFICE

Viv

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,508	07/31/2003	Charlie Steinmetz	200209918-I	4386
7590	10/07/2004		EXAMINER	
HEWLETT-PACKARD COMPANY				VO, ANH T N
Intellectual Property Administration				
P.O. Box 272400				
Fort Collins, CO 80527-2400				2861
ART UNIT				
PAPER NUMBER				

DATE MAILED: 10/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/632,508	STEINMETZ ET AL.	
	Examiner	Art Unit	
	Anh t.n Vo	2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1,5-7,12-33,38 and 39 is/are rejected.
- 7) Claim(s) 2-4,8-11 and 34-37 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/19/04 & 7/31/03</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

Specification

The specification has been checked to the extent necessary to determine the presence of all possible minor errors. However, the applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

CLAIM REJECTIONS

Claim Rejections - 35 USC § 112

Claims 1-18, 23, 33 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction or clarification is required.

In claim 1, it is unclear what the “desired position” and “desired orientation” are, how the pocket can guide the container into the desired orientation and how this limitation is read on the preferred embodiment or seen on the drawings. The same is true for reciting “seated orientation” in claims 23 and 39

In claim 33, the recitation “the front portion” on line 2 lacks clear antecedent basis.

The remaining claims are dependent from the above claims and therefore also considered indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2861

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in-
- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1, 15 and 39 are rejected under 35 USC 102 (b) as being anticipated by Takagi et al. (US Pat. 5,359,357).

Takagi et al. disclose in Figure 6 an ink jet printer comprising:

- a leading surface (a bottom of an element T);
- an alignment pocket (81b) recessed into a center portion of the leading surface, wherein the alignment pocket (81b) is configured to mate with an outwardly-extending alignment member (65) of the printing-fluid container bay (K) so as to guide the printing-fluid container (T) into a desired position with a desired orientation; and
- wherein the alignment pocket (81b) recesses substantially normal to the leading surface.

Claims 1, 15 and 39 are rejected under 35 USC 102 (b) as being anticipated by Sasaki et al. (US Pat. 5,815,183).

Sasaki et al. disclose in Figures 1-4 an ink jet printer comprising:

- a leading surface (40B);
- an alignment pocket (41) recessed into a center portion of the leading surface (40B), wherein the alignment pocket (41) is configured to mate with an outwardly-extending alignment member (35) of the printing-fluid container bay (30) so as to guide the printing-fluid container (8) into a desired position with a desired orientation; and

- wherein the alignment pocket (41) recesses substantially normal to the leading surface (40B) (Figure 4).

Claims 1, 16, 18 and 39 are rejected under 35 USC 102 (b) as being anticipated by Mochizuki et al. (US Pat. 6,264,314).

Mochizuki et al. disclose in Figures 11-12 an ink jet printer comprising:

- a leading surface (4a);
- an alignment pocket (2) recessed into a center portion of the leading surface (4a), wherein the alignment pocket (2) is configured to mate with an outwardly-extending alignment member (15, 90) of the printing-fluid container bay (90) so as to guide the printing-fluid container (80) into a desired position with a desired orientation;
- wherein the alignment pocket (2) recesses at least 15 millimeters from the leading surface (4a); and
- wherein a depth of the alignment pocket (2) is at least approximately 1.5 times a width of an opening of the alignment pocket (Figure 11).

Claims 1, 15-16, 18, 29-33 and 39 are rejected under 35 USC 102 (e) as being anticipated by Ujita et al. (EP Pat. 0562717).

Ujita et al. disclose in Figures 31-34 a liquid recording apparatus comprising:

- a leading surface (a leading surface that has a hole 27);
- an alignment pocket (27) recessed into a center portion of the leading surface, wherein the alignment pocket (27) is configured to mate with an outwardly-extending alignment member (18) of the printing-fluid container bay (34) so as to guide the printing-fluid container (1) into a desired position with a desired orientation;
- wherein the alignment pocket (27) recesses substantially normal to the leading surface (Figure 31).

Art Unit: 2861

- wherein the alignment pocket (27) recesses at least 15 millimeters from the leading surface; and
- wherein a depth of the alignment pocket (27) is at least approximately 1.5 times a width of an opening of the alignment pocket (Figures 31-34).

Claims 1, 5-7, 12-14 and 29-33, 38-39 are rejected under 35 USC 102 (b) as being anticipated by Suenaga et al. (US Pat. 6,612,689).

Suenaga et al. disclose in Figures 3-8 an ink supply device comprising:

- a leading surface (a leading surface that contains elements 42 and 44) (Figure 4);
- an alignment pocket (80) recessed into a center portion of the leading surface, wherein the alignment pocket (80) is configured to mate with an outwardly-extending alignment member (82, 84) of the printing-fluid container bay (46) so as to guide the printing-fluid container (30) into a desired position with a desired orientation (Figures 3-4 and 7-8);
- an air-interface (42) and an ink-interface (44), wherein a common vertical axis intersects the air-interface and the ink-interface;
- wherein the alignment pocket (80) is positioned on the vertical axis intermediate the ink-interface (44) and the air-interface (42) (Figures 3 and 7);
- wherein the alignment pocket (80) is positioned on the vertical axis above the ink-interface (44) and below the air-interface (42) (Figures 3-4 and 7-8);
- wherein the alignment pocket (80) is positioned substantially equidistant from the air-interface (42) and the ink-interface (44);
- wherein the vertical axis bisects the leading surface; and
- wherein the alignment pocket (80) includes tapered sidewalls (Figure 80).

Claims 19-28 are rejected under 35 USC 102 (b) as being anticipated by Childers et al. (US Pat. 6,170,937).

Childers et al. disclose in Figures 1, 3, 5 and 8-9 an ink supply system comprising:

- an alignment pocket (20) configured to receive the outwardly-extending alignment member (28);
- first and second latching surfaces (64) configured to receive a retaining force from first and second latching members (68) of the printing-fluid container bay (14), wherein at least a portion of the first and second latching surfaces (64) are coplanar with at least a portion of the alignment pocket (Figures 3 and 8);
- wherein the first and second latching surfaces (64) and the alignment pocket (20) intersect a horizontally extending plane (Figure 3);
- wherein the first and second latching surfaces (64) are located on a rim portion of the printing-fluid container (12) (Figure 5);
- wherein the alignment pocket (20) is configured to mate with the outwardly-extending alignment member (28) (Figure 3);
- wherein the alignment pocket (20) is configured to guide the printing-fluid container (12) into a seated orientation in the printing-fluid container bay (14) (Figure 1);
- wherein the alignment pocket (20) includes tapered sidewalls (Figures 8-9);
- wherein the alignment pocket (20) recesses substantially normal to the leading surface (74) (Figures 8-9);
- wherein the alignment pocket (20) recesses at least 15 millimeters from the leading surface (74) (Figures 3 and 5);
- wherein the alignment pocket (20) has a substantially rectangular opening (Figures 8-9); and
- wherein a depth of the alignment pocket (20) is at least approximately 1.5 times a width of an opening of the alignment pocket (Figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 17 is rejected under 35 USC 103 (a) as being unpatentable over Suenaga et al. (US Pat. 6,612,689).

Suenaga et al disclose the claimed invention except for “the alignment pocket that has a substantially rectangular opening”. It would have been obvious to one having ordinary skill in the art at the time the invention was made to select changes in the shape of the alignment pocket for the purpose of selectively mating between two elements, since it is a mechanical design expedient for an engineer depending upon a particular environment and the applications in which the ink jet cartridge is to be used. In re Daily, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). See MPEP 2144.04.

Allowable Subject Matter

Claims 2-4 and 37 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because none of the prior art references of record discloses a printing fluid container comprising the printing-fluid container bay that includes a latching member, wherein the printing fluid container further comprises a latching surface configured to be selectively engaged by the latching member, and wherein the latching surface and the alignment pocket intersect a horizontally extending plane in the combination as claimed.

Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses a printing fluid container comprising an electrical interface, wherein a common horizontal axis intersects the electrical interface, and wherein the horizontal axis intersects the vertical axis at the alignment pocket in the combination as claimed.

Art Unit: 2861

Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses a printing fluid container comprising a keying pocket, wherein a common horizontal axis intersects the keying pocket, and wherein the horizontal axis intersects the vertical axis at the alignment pocket in the combination as claimed.

Claims 10-11 and 36 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because none of the prior art references of record discloses a printing fluid container comprising an electrical interface and a keying pocket, wherein a common horizontal axis intersects the electrical interface and the keying pocket, and wherein the horizontal axis intersects the vertical axis at the alignment pocket in the combination as claimed.

Claim 34 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses a printing fluid container comprising a keying pocket positioned on the leading portion of the reservoir, wherein a common horizontal axis intersects the keying pocket and the alignment pocket in the combination as claimed.

Claim 35 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. This claim would be allowable because none of the prior art references of record discloses a printing fluid container comprising an electrical interface positioned on the leading portion of the reservoir, wherein a common horizontal axis intersects the electrical interface and the alignment pocket in the combination as claimed.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo, whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 8:00 A.M. to 6:00 P.M. The fax number of this Group 2861 is (703) 872-9306.



ANH T.N. VO
PRIMARY EXAMINER

October 3, 2004